Statistical Discovery.™ From SAS.

JMP® 8 - QUICK GUIDE

Instructions presume a data table is open and the user will specify the appropriate variables of interest.

For complete information, please refer to the JMP Introductory Guide available under “Help > Books”.

Graphing	
Frequency Distribution	Analyze > Distribution
Bar Chart	1. Graph > Graph Builder > Drag Continuous Variable to Y and Categorical to X > RMC > Points > Change to > Bar 2. Graph > Chart
Pie Chart	Graph > Chart > Options > Pie Chart
Histogram	Analyze > Distribution
Stem-and-leaf display	Analyze > Distribution; select ▾ Stem and Leaf
Scatter Plot 2D	1. Graph > Graph Builder > Drag Continuous Variable to Y and another one to X 2. Analyze > Fit Y by X (Bivariate) 3. Graph > Overlay Plot
Scatter Plot 3D	Graph > Scatterplot 3D
Scatter Plot Matrix	1. Graph > Scatterplot Matrix 2. Analyze > Multivariate Methods > Multivariate
Trellis Plot	Graph > Graph Builder > Drag Column to Y and one to X; Drag Nominal or Ordinal Column to Wrap
Line Chart	1. Graph > Graph Builder > Drag Continuous Variable to Y and another one to X > RMC in graph > Smoother > Change to > Line 2. Graph > Overlay Plot; select ▾ y options > Connect Points
Box Plot - One Level	1. Graph > Graph Builder > Continuous column to Y > RMC > Points > Change to > Box Plot

	2. Analyze > Distribution
Box Plot - Two or More Levels	1. Graph > Graph Builder > Continuous column to Y and categorical to X > RMC > Points > Change to > Box Plot 2. Analyze > Fit Y by X; select Display Options > Box Plot
Basic Statistics	
Descriptive statistics	1. Analyze > Distribution; select Display Options > More Moments 1. Tables > Summary 2. Tables > Tabulate
z- or t- test 1. 1-Sample 2. 2-Sample 3. Paired t	1. Analyze > Distribution; select Test Mean 2. Analyze > Fit Y by X; select t Test or Means/ANOVA/Pooled t 3. Analyze > Matched Pairs
Testing Proportions *(make 0/1 indicator Nominal or Ordinal)* 1. 1 Proportion 2. 2 Proportion	1. Analyze > Distribution; select Test Probabilities 2. Analyze > Fit Y by X
Contingency table – Chi-Square test	Analyze > Fit Y by X
Covariance	Analyze > Multivariate Methods > Multivariate; select Covariance matrix
Correlation	Analyze > Multivariate Methods > Multivariate
Test for Normality Test/Goodness-of-fit Test	Analyze > Distribution; select Continuous Fit > Normal; select by Fitted Distribution > Goodness of Fit
Probability/Random Variables	
Probability Variables	On data table select Columns > New Column; RMC on new column > Formula; select Probability from Functions Window; select desired probability function. Note: For more information on the expected parameters see help under Probability Functions
Random Variables	1. On data table select Columns > New Column; RMC on new column > Column Info. Click on Drop down box next to Initial Data Values > Random 2. On data table select Columns > New Column; RMC on

	new column > Formula; select Random from Functions Window; select desired Random function. Note: For more information on the expected parameters see help under Random Function
Distribution Fitting	Analyze > Distribution; select Continuous Fit, then select either Normal, LogNormal or Weibull
Analysis of Variance	
One-Way	Analyze > Fit Y by X; select Means/Anova
Two or more Factors	Analyze > Fit Model
Randomized Blocks	Analyze > Fit Y by X; include column in Block role
Multiple Comparison Methods	Analyze > Fit Y by X; select Means/Anova; select Compare Means
Test for Equal/Unequal Variances	Analyze > Fit Y by X; select Means/Anova; select Unequal Variances
Regression	
Scatter Plot	1. Analyze > Fit Y by X (Bivariate) 2. Graph > Overlay
Simple Least Squares 1. One Independent Variable 2. One or More Independent Variables	1. Analyze > Fit Y by X; select Fit Line 2. Analyze > Fit Model
Logistic Regression 1. One Independent Variable 2. One or More Independent Variables	1. Analyze > Fit Y by X; select Fit Line 2. Analyze > Fit Model
Multiple Regression	Analyze > Fit Model
Stepwise Regression	Analyze > Fit Model > Personality – Select Stepwise
Residual Analysis	Analyze > Fit Model; Run Model; select Row Diagnostics
Interaction Plots	Analyze > Fit Model; Run Model; select Factor Profiling > Interaction Plots
Durbin-Watson Test	Analyze > Fit Model; Run; select Row Diagnostics > Durban Watson Test
Time Series	
Time Series Plot	Analyze > Modeling > Time Series
Moving Averages	Analyze > Modeling > Time Series; select ARIMA

Exponential Smoothing	Analyze > Modeling > Time Series; select Smoothing Models
Holt-Winters Method	Analyze > Modeling > Time Series; select Smoothing Model > Winters Method
Data Mining	
ogistic & Multiple Regression	Analyze > Fit Model
Decision Trees	Analyze > Modeling > Partition
Neural Networks	Analyze > Modeling > Neural Net
Clustering	Analyze > Multivariate Methods > Cluster
Nonparametric techniques	
Wilcoxon Rank Sum Test	Analyze > Fit Y by X; select Nonparametric > Wilcoxon Test
Fishers Sign Test (for 2x2 tables only)	Analyze > Fit Y by X
Wilcoxon Signed Rank Sum Test	Analyze > Distribution; select Test Mean > Check Wilcoxon Signed Rank Box
Kruskal-Wallis Test	Analyze > Fit Y by X; select Nonparametric > Wilcoxon Test
Spearman's P	Analyze > Multivariate Methods > Multivariate; select Nonparametric Correlations > Spearman's P
Quality Control	
Control Charts 1. X-bar 2. Individual Measurements (IR) 3. p Chart 4. u Chart 5. CUSUM	1. Graph > Control Chart > XBar 2. Graph > Control Chart > IR 3. Graph > Control Chart > P 4. Graph > Control Chart > U 5. Graph > Control Chart > CUSUM
Pareto	Graph > Pareto Plot
Cause & Effect Diagram	Graph > Diagram
Variability Chart	Graph > Variability/Gauge Chart
1. Capability 2. Capability with additional graphs on same output (IR, MR, Distribution, Normal Quantile Plot)	1. Graph > Capability 2. Graph > Control Chart > IR; check Capability Box. > OK, Fill in Specification Limits
Design of Experiments (DOE)	
Factorial Design	1. DOE > Full Factorial Design 2. DOE > Screening Design

Screening Design	DOE > Screening Design
Response Surface Design	DOE > Response Surface Design
Sample Size and Power Calculations	DOE > Sample Size and Power

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